

Prepared by
Hemken & Ivers Research Services
for
Bureau of Integrated Science Services
Wisconsin Department of Natural Resources
Madison, Wisconsin

February 2005

Table of Contents

Highlights	3
Introduction	4
Data and Methods Table 1: Sample Size by Year Table 2: Recreational Activity Sample Size and Years Surveyed	5 5 6
Results Yearly Variation and Trends Geography Demographics	8 8 9 10
Suggestions for Future Research	16
Detailed Tables Table 3: Recreation Participation by Year Table 4: Projected Recreation Participation, 2005 to 2020 Table 5: Recreation Participation by WDNR Region Table 6: Recreation Participation by Age Table 7: Recreation Participation by Gender Table 8: Recreation Participation by Income Table 9: Recreation Participation by Education	17 18 21 22 24 27 29 31
References	33
Appendix Survey Questions	36

Highlights

- Overall Popularity. Of the outdoor activities surveyed, the most popular were walking for pleasure (84% participation) and driving for pleasure (70%), followed by swimming, picnicking, and wildlife viewing.
- Or Trends. While participation in outdoor activities varies from year to year, the data analyzed here from 1992 through 2002 show few clear trends in participation rates for the outdoor activities examined. The exceptions are bicycling and camping, which have increased in popularity, and cross-country skiing, which has declined in popularity. Although there are no other measurable trends in participation, population growth is expected to result in an increase in total participation in all outdoor activities through 2015; over this period, population growth should more than offset declines in participation due to overall aging of the Wisconsin population.
- OWDNR Regions. Participation in some outdoor activities varies across different regions within Wisconsin. Participation rates for hunting, fishing, wildlife viewing, bird-watching, canoeing, boating, and ATV and snowmobile riding are highest in the WDNR's Northern Region. Participation rates for swimming and sailing are highest in the Southeast Region
- ° Age. All outdoor activities vary in popularity among different age groups. In general, participation in outdoor activities peaks with people in their younger decades and declines after people reach age 40 or 50. Some activities, such as running, tent-camping, mountain biking, canoeing, ATV riding, in-line skating, downhill skiing, jet-skiing, and rock climbing are most popular among young adults (< 30 years old), while other activities are more popular among those in their middle years (30-50 years old). Bird watching/other nature study achieves peak popularity among those over 50 years old.</p>
- ° *Gender*. A little over half of the activities surveyed vary in participation by gender. Bird watching and in-line skating are more popular among women than men. Other activities such as swimming, bicycling, fishing, camping, and hunting are more popular among men.
- ° *Income*. Participation rates for most activities increase as income increases. Walking, swimming, bicycling, fishing, and hunting are all more popular among those with more income. A few activities, such as running, ATV riding, snowmobiling, and backpacking have no association with income.
- Objection of the Education of the Edu

Introduction

This is a compilation of Wisconsin Department of Natural Resources (WDNR) data on participation in a variety of outdoor activities among Wisconsin residents age 18 and older. Data on participation was collected in a series of WDNR phone surveys from 1992 through 2002, using questions consistent in form with those used in previous state and national studies. Information was also collected on the age, gender, education, income, and geographic location of each respondent. The results are presented as both percents of the adult population and as the number of participating adults in each category.

Data and Methods

Data used for this analysis were collected in surveys conducted annually from 1992 through 1997, and in 2002. Each survey was conducted over a 3-4 week period in fall or winter. Households were selected by a random digit dial sampling strategy. Within households, respondents were selected at random from the adults (over 18 years old) living there. Sampling and interviewing were performed by the University of Wisconsin Survey Center with a response rate varying between 60% and 70%. Yearly samples ranged from 419 to 800, with a total sample of 3706 interviews collected that is representative of the adult population of Wisconsin (see table 1).

Table 1

Year of Survey	Sample size
1992	419
1993	451
1994	521
1995	441
1996	800
1997	628
2002	446
Total	3706

In most years, recreation questions were asked as additional information on surveys of other topics. From 1992 through 1995 and in 2002, recreation questions were included as part of recycling surveys; the recreation questions were asked after a set of recycling questions, but before demographic questions. In 1996, recreation questions were included as part of a study of recreation in northern State Forests; general recreation questions were asked first in each interview before more specific questions about Northern Forest recreation. In 1997, recreation questions were included as part of a study on public attitudes toward conservation funding; again, general recreation questions were asked first in each interview before questions about environmental values and about funding conservation programs. The consistency of the answers across years shows that these recreation questions were not particularly context sensitive to non-recreation questions, nor were they sensitive to their position within the interview. Each interview was short, generally 15-20 minutes. Due to the limits this survey strategy placed on the interview time devoted to recreation, only a limited number of questions could be asked in any one year.

As far as possible, questions were worded in accordance with standardized questions which have been in wide use for several decades to facilitate comparison with previous state and national surveys (U.S. Bureau of Outdoor Recreation 1966; U.S. Bureau of Outdoor Recreation 1972; U.S. Heritage Conservation and Recreation Service 1979; U.S. National Park Service 1986; Wisconsin Department of Natural Resources 1991; Cordell *et al.* 1995).

While a few questions were asked every year, most were not asked yearly. Additionally, the wording of several questions was changed, notably for hiking, camping, and wildlife-related activities, either lumping or splitting groups of activities. For example, "bird watching and other nature study" were addressed as a single question from 1992 through 1996. In 1997 and 2002 this was split into two questions, one about "bird watching" and another about "wildlife viewing". Finally, the answer categories for the question about income varied from year to year. (For details of question wording see the Appendix.)

The result is that some recreational activities can be analyzed in more detail and with more accuracy than others. Because the sample sizes for individual activities vary, it is not possible to make a blanket statement about the accuracy of the statistics presented in this report. Furthermore, it would be unwieldy to include, for each table cell, estimates of confidence limits and the sample sizes upon which the confidence limits are based. However, readers should be able to calculate reasonably accurate estimates of cell sample sizes for themselves from information about total sample size for each activity (see table 2) and the population proportions used for each table column (see the detailed tables).

In general, the margin of error for any percent participation reported depends upon the number of people surveyed on that question and the proportions answering yes and no. Where two activities have about the same participation rate, the estimate based on the larger sample is more precise. For example, bicycling, with an estimated participation of 47.9% based on 3705 interviews, is accurate to $\pm 1.6\%$, but hiking, with an estimated participation of 46.4%, is based on a much smaller number of interviews (628) and is accurate to only $\pm 3.9\%$. Similarly, where two activities are based on the same number of interviews, the estimate which is farthest from a 50%/50% distribution is more precise. For example sailing, based on 2632 interviews with an estimated 6.6% participation is accurate to $\pm 0.9\%$, but bird watching/other nature study, based on 2631 interviews, has an estimated 47.3% participation and so is accurate to only $\pm 1.9\%$.

As reported in the tables that follow, probabilities that differences among analytical categories within each activity reflect real, measurable differences are calculated individually by activity.

Table 2

Activity	Sample size	Years
Bicycling	3705	1992-1997, 2002
Cross-country skiing	3705	1992-1997, 2002
Fishing	3705	1992-1997, 2002
Hunting	3705	1992-1997, 2002
Canoeing	3704	1992-1997, 2002
Camping, tent & RV	3703	1992-1997, 2002
Motor boating	3702	1992-1997, 2002
Camping with a tent	3076	1992-1996, 2002
Walking for pleasure	3076	1992-1996, 2002
Camping with an RV	3074	1992-1996, 2002
Day hiking	2901	1992-1995, 2002
Sailing	2632	1992-1996
Bird watching/other nature study	2631	1992-1996
Swimming	2631	1992-1996
Driving for pleasure	2210	1993-1996
Nature photography	1870	1996-1997, 2002
ATV riding	1246	1996, 2002
Snowmobiling	1246	1996, 2002
Jet-skiing	1245	1996, 2002
Bird watching	1074	1997, 2002
Mountain biking	1074	1997, 2002
Wildlife viewing	1073	1997, 2002
Backpacking	864	1992, 2002
Downhill skiing	864	1992, 2002

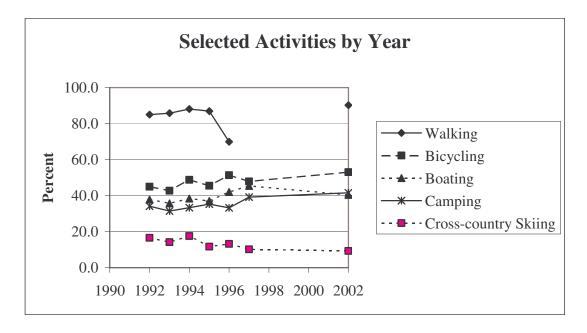
Activity	Sample size	Years
Golfing	800	1996
Horseback riding	800	1996
Picnicking	799	1996
Hiking	628	1997
Rock climbing	446	2002
Running	446	2002
In-line skating	445	2002
Ice skating	418	1992

Results

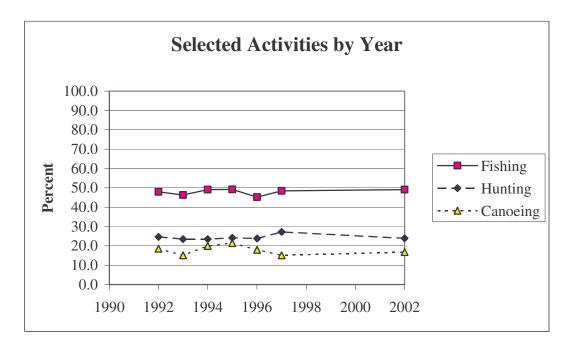
Of the outdoor activities examined here, the most popular among Wisconsin adults was walking for pleasure (84.4% participation, see Table 3). Other popular outdoor activities include driving for pleasure (69.6%), swimming (60.6%), picnicking (57.1%), and viewing wildlife (53.9%). Nearly as popular were bicycling (47.9%), fishing (47.9%), bird watching/other nature study (47.3%), and hiking (46.4%).

YEARLY VARIATION AND TRENDS

Within any given outdoor activity, participation varies from year to year. This is due to the changing popularity of various activities, availability of recreation venues, and suitable weather. Recreational participation is also affected by changes in disposable income, free time, and the changing demographic structure of the population.



Of the 24 activities in these surveys assessed for more than one year, 13 activities showed statistically measurable variation from year to year (see Table 3): walking for pleasure, driving, swimming, viewing wildlife, bicycling, bird watching/other nature study, day hiking, motor boating, camping, bird watching, nature photography, ATV riding, and cross-country skiing. Because the yearly series are incomplete for many activities, such as viewing wildlife or ATV riding, it is difficult to spot statistical trends with any confidence. For activities where the data are more complete, like driving for pleasure or bird watching/other nature study, statistical trends appear to be the result of one unusual year. However, for a very few activities, there do seem to be observable trends: bicycling and camping appear to have increased in popularity over the last decade, while participation in cross-country skiing seems to have decreased.



Given the general lack of trends, further analysis of these data will examine average participation rates over 1992 through 2002.

Projections for recreational participation from 2005 through 2020 were calculated by the UW-Applied Population Lab based on current participation by sex and age, using U.S. Census estimates of projected population by sex and age. The total number of people participating in each recreational activity is projected to increase through 2020 for most activities, with the fastest growth occurring before 2010 and slowing growth by 2020 (see table 4). A few activities, such as mountain-biking, in-line skating, downhill skiing, jet-skiing, horseback riding, and rock climbing are projected to see stagnating or declining participation sometime after 2015 as a result of an aging population.

GEOGRAPHY

Participation in outdoor recreation varies from region to region. These differences can be due to the differences in natural resources, due to the different recreational facilities available, or due to different recreation preferences of an area's residents.

WDNR Regions. For purposes of Wisconsin Department of Natural Resources planning and program administration, Wisconsin is divided into five regions: Northern, Northeast, West Central, South

Central, and Southeast regions.¹ Of the 32 activities included in these surveys, about half (17) show measurable variation in participation rates among residents from region to region (see Table 4). Activities which have a level participation rate across the state are walking for pleasure, driving for pleasure, bird watching/other nature study, hiking, running, photography, mountain biking, ice skating, cross-country skiing, backpacking, jet-skiing, horseback riding, and rock climbing.

Because the Southeast region has 37% of Wisconsin's adult population, that region carries the greatest weight in determining the statewide popularity of outdoor activities. The Southeast region is also the most urbanized part of Wisconsin, and consequently has the lowest participation rates in ten of the activities with measurable variation. The Southeast has the lowest participation rates in the state in wildlife viewing, bird watching, fishing, hunting, camping, camping with a tent, camping with an RV, motor boating, canoeing, and ATV riding. The Southeast region has higher participation rates than the rest of the state in three activities -- swimming (64.7%), bicycling (50.2%, statistically tied with several other regions), and sailing (8.6%).

In some ways the Northern region represents the opposite end of the recreation participation spectrum. In contrast to the Southeast, the Northern region has the lowest participation rates among residents for bicycling (38.5%), golfing (18.3%) and sailing (4.5%), statistically tied with several other regions). At the same time the Northern region has the highest participation rates in the state for wildlife viewing (67.6%), bird watching (42.6%), fishing (60.0%), hunting (40.9%), day hiking (46.9%), motor boating (52.1%), canoeing (25.8%), ATV riding (25.7%), and snowmobiling (22.9%).

The Northeast, West Central, and South Central regions are then something like the regions they border. The Northeast region is distinctive for its high participation rate in golfing (37.1%), and for its low participation in day hiking (35.8%). The West Central region is distinctive for its high participation in camping with an RV (18.1%) and downhill skiing (18.4%), and for its low participation in swimming (54.3%). The South Central region is distinctive for its high participation in camping with a tent (30.7%), and its low participation in snowmobiling (7.1%) and downhill skiing (5.0%).

DEMOGRAPHICS

Age. For this analysis, age was analyzed in 10 year age groups. Every outdoor activity shows measurable differences in participation rates across age groups. For most activities, participation rates peak when people are in their younger decades, and decline after age 40 or 50. This, along with the decline in population share by each age group currently age 50 or older, combine for greatly reduced numbers of outdoor participants in the groups age 50 and above (see table 6).

The WDNR regions are divided along county lines. They are:

Northern Region: Ashland, Barron, Bayfield, Burnett, Douglas, Florence, Forest, Iron, Langlade, Lincoln, Oneida, Polk, Price, Rusk, Sawyer, Taylor, Vilas, Washburn

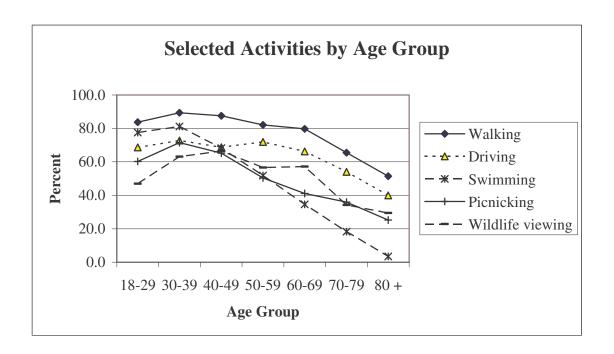
Northeast Region: Brown, Calumet, Door, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Waupaca, Waushara, Winnebago

West Central Region: Adams, Buffalo, Chippewa, Clark, Dunn, Eau Claire, Jackson, Juneau, La Crosse, Marathon, Monroe, Pepin, Pierce, Portage, St. Croix, Trempealeau, Vernon, Wood

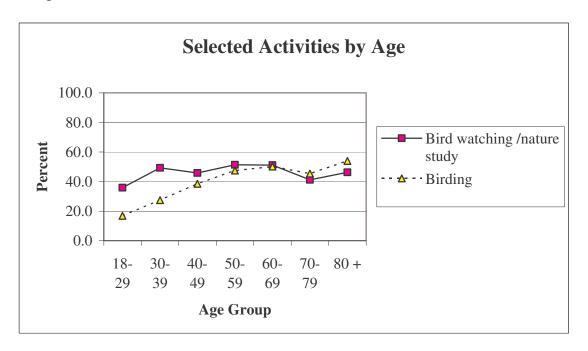
South Central Region: Columbia, Crawford, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Richland, Rock, Sauk

Southeast Region: Kenosha, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington, Waukesha

10



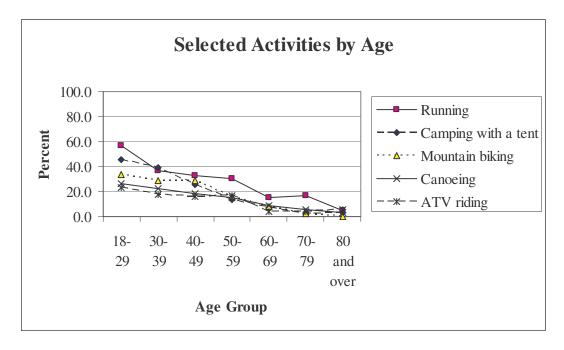
The notable exceptions to this overall pattern are bird watching/other nature study and just bird watching. Bird watching/other nature study peaks among those in their 30s and does not fall significantly in older groups. Bird watching (as a separate category) peaks among those in their 50s and remains high even among those 80 or older.



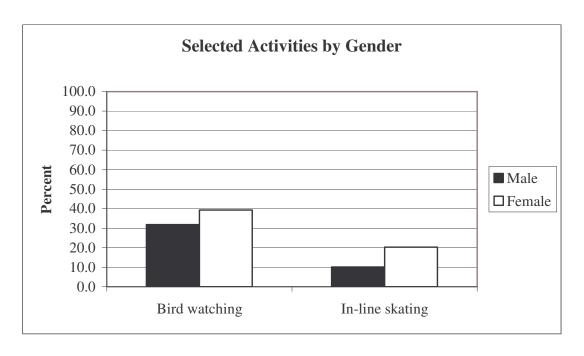
Like bird watching, several other activities reach their peak participation rates beyond age 30. Cross-country skiing and wildlife viewing have their highest participation rates among those in their 40s. Walking for pleasure, swimming, picnicking, motor boating, fishing, hunting, hiking and day hiking, nature photography, golfing, camping with an RV, and backpacking all achieve their respective peaks

among those in their 30s.

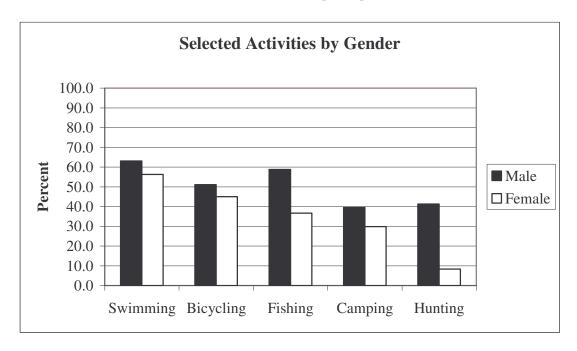
All other activities are at their most popular beginning with those in their 20s. However, activities vary considerably in the duration of this popularity. Driving for pleasure maintains a steady popularity right through those in their 50s. The peak popularity of other activities is focused more narrowly among those in their 20s and 30s: bicycling, ice skating, snowmobiling, horseback riding, and sailing. A few activities have their widest popularity among those in their 20s, with a steadily declining popularity among progressively older segments of the population: running, camping with a tent, mountain biking, canoeing, ATV riding, in-line skating, downhill skiing, jet-skiing, and rock climbing.



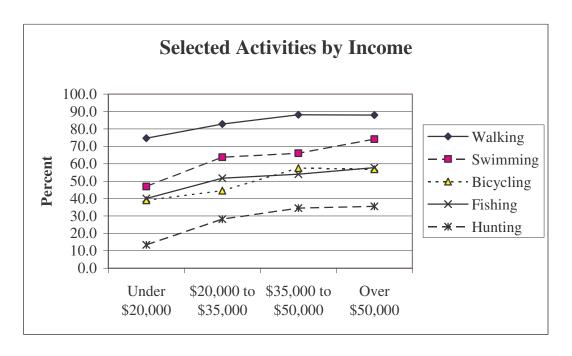
Gender. Somewhat more than half of the activities examined in these surveys have a measurable difference in participation rates between men and women (19 out of 32 activities, see table 7). Women have higher participation rates than men in bird watching and in-line skating.



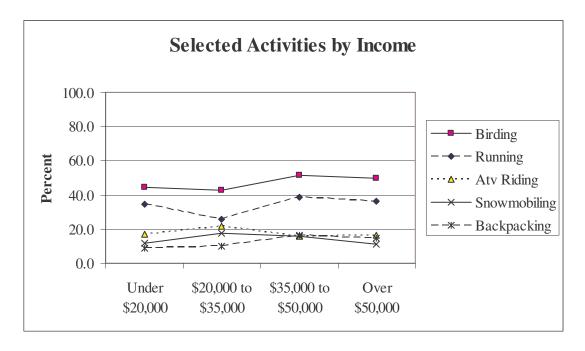
Men have higher participation rates than women in swimming, wildlife viewing, bicycling, fishing, day hiking, motor boating, camping, golfing, camping with a tent, hunting, mountain biking, canoeing, ATV riding, camping with an RV, backpacking, sailing, and rock climbing. In the other 13 activities surveyed, there are no measurable differences in women's and men's participation.



Income. Income was analyzed in four categories: less than \$20,000 annual household income, \$20,000 to \$35,000 annual income, \$35,000 to \$50,000 annual income, and more than \$50,000 annual income. Respondents' household income is positively associated with most outdoor recreations and activities (21 out of 31 activities for which there is data).



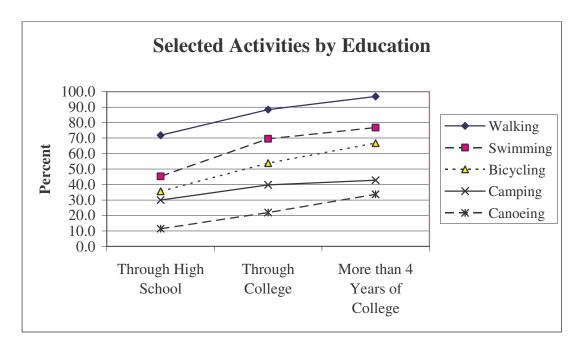
There is no measurable association between income and bird watching/other nature study, running, bird watching, ice skating, ATV riding, in-line skating, snowmobiling, backpacking, jet-skiing, or rock climbing (see table 8).



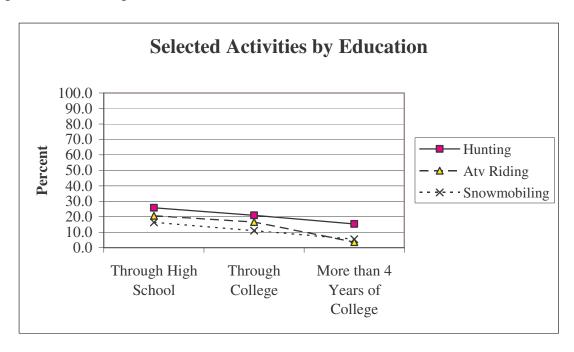
For all activities where there is a measurable difference in participation across income groups, participation is lowest where household income is lowest.

Education. Education was measured in three categories: up to a high school diploma, some college up to a four year degree, and more than four years of college. Most activities (28 of 32) have some measurable association with education (see table 9).

In general, participation in outdoor recreation increases across these broad education categories.



Only three activities showed declining participation across education levels: hunting, ATV riding, and snowmobiling.



The activities which do not vary measurably across education levels are: fishing, camping with an RV, jet-skiing, and rock climbing.

Suggestions for Future Research

There are a number of measures which could be taken to extend and improve the research reported here. First and foremost would be to develop some consistent rationale behind the selection of outdoor activities to be included in future surveys. Possible reasons for tracking outdoor activities might be: those activities that are currently most popular on WDNR managed properties, those activities for which the WDNR maintains facilities, or those activities for which WDNR has rules or policies. Regardless of what basis is used, it should be explicit and consistently developed into a core list of activities.

The next improvement would be to set this research up on a consistent, regularly repeated schedule. While the analysis above suggests that not every question need be asked every year (because the year to year variation is seldom noteworthy), either running the entire survey every other year or running rotating portions of the survey every year would provide better, more consistent data. Committing resources to a recreation survey on a regular basis would allow more detailed questions to be pursued when needed, would facilitate the methodological studies appropriate for quality control of survey data, and would reduce the need to reconcile questions of slightly different wording. This would also make it possible to ensure that questions that identify rare populations -- especially the disabled and non-white ethnicities -- are asked in every wave of the survey. When such questions are only occasionally asked, the result can be too little data for meaningful analysis.

Several further steps could be taken in the analysis of outdoor activities. One would be to examine the selected activities for clusters of activities that individuals pursue, e.g., fishing and boating, or hunting and wildlife viewing. Another step would be to model the joint effects of geographic and demographic variables on recreation participation, e.g., in a logistic regression. This would help in understanding the simultaneous effects of age, education, and income, which are correlated. A more ambitious analysis would be to match these data with geographical information on natural resources and recreational facilities used for each activity. Participation could be analyzed in terms of the number of sites nearby and their distance from participants.

While some analysis of activity clusters or the joint effects of demographic variables would be possible with the present data, analysis would be much more informative if data included information on frequency of participation for each activity. However, this would greatly lengthen any survey. And to acquire such data of even vague reliability would require quarterly or bimonthly surveys to be run over the course of 1-2 years, at a minimum. Given the intensity of the research effort that would be required, the value of the resulting analysis would have to be clear before such an undertaking was begun.

Detailed Tables

Table 3: Recreation Participation by Year

Recreational Activity			Participat	tion by year,	% and popula	ition		
	1992	1993	1994	1995	1996	1997	2002	Average
Adult Population ¹	3,676,996	3,721,995	3,752,902	3,792,409	3,829,440	3,850,947	4,099,571	
Walking for pleasure ²	85.0	85.8	88.1	87.0	69.9		90.2	84.4
	3,124,437	3,193,818	3,306,314	3,298,345	2,677,359		3,698,435	
Driving for pleasure ²		72.2	70.7	71.9	63.7			69.6
		2,688,108	2,652,310	2,728,338	2,438,498			
Swimming ²	67.1	53.0	63.6	63.6	55.9			60.6
	2,465,695	1,972,410	2,387,862	2,411,533	2,142,562			
Picnicking					57.1			57.1
					2,185,137			
Wildlife viewing ²						57.8	50.2	53.9
						2,226,313	2,056,384	
Bicycling ²	45.0	42.8	48.8	45.5	51.4	47.9	53.1	47.9
	1,653,035	1,592,783	1,830,452	1,723,803	1,968,504	1,846,059	2,176,481	
Fishing	47.9	46.3	49.1	49.2	45.2	48.4	49.1	47.9
	1,759,745	1,724,827	1,842,907	1,864,387	1,732,483	1,862,709	2,012,348	
Bird watching/other nature	48.3	48.8	53.9	49.2	36.8			47.3
study ²	1,775,928	1,815,607	2,022,811	1,865,730	1,407,523			
Hiking						46.4		46.4
						1,788,718		
Day hiking ²	43.6	36.4	42.0	39.3		46.4	33.1	40.1
	1,603,411	1,354,208	1,577,483	1,490,792		1,788,718	1,357,144	
Motor boating ²	37.9	35.8	38.4	37.1	42.1	45.4	40.5	39.6
	1,392,885	1,331,647	1,439,801	1,407,353	1,610,332	1,747,947	1,658,905	
Camping, tent & RV ²	34.2	31.5	33.4	35.3	33.3	39.2	41.6	35.6
	1,257,961	1,171,892	1,251,850	1,337,853	1,274,885	1,510,846	1,705,127	

Recreational Activity			Participat	ion by year, %	% and popula	tion								
	1992	1993	1994	1995	1996	1997	2002	Average						
Adult Population ¹	3,676,996	3,721,995	3,752,902	3,792,409	3,829,440	3,850,947	4,099,571							
Running							34.9	34.9						
							1,431,576							
Bird watching ²						38.3	29.8	33.9						
						1,476,517	1,219,715							
Nature photography ²					39.1	31.9	29.2	33.3						
					1,497,694	1,227,269	1,195,551							
Golfing					28.7			28.7						
					1,099,742									
Camping with a tent	26.6	22.6	26.0	27.4	25.3		31.6	26.6						
	976,551	841,782	974,256	1,038,806	967,734		1,293,808							
Hunting	24.6	23.5	23.5	24.1	23.8	27.2	23.9	24.4						
	904,844	874,793	882,290	914,809	909,569	1,046,500	979,767							
Mountain biking						21.3	24.4	22.9						
						820,493	1,000,846							
Canoeing	18.5	15.1	19.9	21.4	17.9	15.1	16.8	17.8						
	679,428	561,188	747,940	812,399	685,643	582,173	688,181							
Ice skating	17.7							17.7						
	649,743													
ATV Riding ²					13.7		18.7	16.2						
					523,449		764,743							
In-line skating							15.8	15.8						
							647,725							
Camping with an RV	13.7	13.5	13.3	14.3	11.2		16.6	13.8						
	505,334	503,418	497,661	543,043	428,180		680,525							

Recreational Activity			Participat	tion by year,	% and popula	tion		
	1992	1993	1994	1995	1996	1997	2002	Average
Adult Population ¹	3,676,996	3,721,995	3,752,902	3,792,409	3,829,440	3,850,947	4,099,571	
Snowmobiling					15.1		12.5	13.8
					579,196		512,019	
Cross-country skiing ²	16.6	14.2	17.6	11.7	13.2	10.2	9.3	13.2
	611,767	528,177	660,235	445,072	505,565	391,814	381,870	
Downhill skiing	12.3						11.2	11.7
	451,342						458,340	
Backpacking	11.0						8.8	9.8
	403,860						360,964	
Jet-skiing					8.0		9.1	8.6
					307,957		374,752	
Horseback riding					7.8			7.8
					296,821			
Sailing	7.8	7.3	7.3	5.1	5.3			6.6
	287,036	272,341	275,449	194,729	201,585			
Rock climbing							6.4	6.4
							262,175	

Table notes:

Blank cells are items for which there is no data.

¹ Total adult populations for 1992-2002 are based on US Census 2000a-f and US Census 2002.

² There are measurable differences between years in participation for this activity (p=0.5).

Table 4: Projected Recreation Participation, 2005 to 2020¹

Recreational Activity	Participation %	Population Projection					
	Average	2005	2010	2015	2020		
Walking for pleasure	84.4	3,463,676	3,610,833	3,731,107	3,823,923		
Driving for pleasure	69.6	2,829,481	2,958,409	3,061,993	3,134,682		
Swimming	60.6						
Picnicking	57.1	2,356,996	2,428,724	2,486,318	2,536,206		
Wildlife viewing	53.9	2,276,703	2,368,774	2,449,177	2,514,695		
Bicycling	47.9	2,035,604	2,087,699	2,113,062	2,122,842		
Fishing	47.9	1,951,343	2,027,894	2,089,767	2,132,942		
Bird watching/other nature study	47.3	1,874,156	1,963,248	2,043,380	2,108,758		
Hiking	46.4	1,952,573	2,026,214	2,079,735	2,113,592		
Day hiking	40.1	1,633,812	1,693,034	1,737,875	1,766,580		
Motor boating	39.6	1,669,606	1,735,281	1,784,603	1,814,316		
Camping, tent & RV	35.6	1,485,129	1,494,088	1,514,442	1,523,240		
Running	34.9	1,486,764	1,537,498	1,562,983	1,572,891		
Bird watching	33.9	1,455,308	1,542,419	1,626,663	1,701,006		
Nature photography	33.3	1,418,228	1,475,148	1,523,370	1,559,513		
Golfing	28.7	1,162,007	1,186,870	1,206,184	1,226,627		
Camping with a tent	26.6	1,087,394	1,108,466	1,117,820	1,118,972		
Hunting	24.4	953,660	987,952	1,012,449	1,026,976		
Mountain biking	22.9	965,459	984,842	989,596	988,510		
Canoeing	17.8	747,197	769,541	780,017	782,322		
Ice skating	17.7	568,665	585,879	591,738	592,634		
ATV Riding	16.2	636,375	655,843	661,389	659,475		
In-line skating	15.8	682,753	691,069	693,104	693,008		
Camping with an RV	13.8	552,904	573,023	587,985	597,515		
Snowmobiling	13.8	581,117	593,102	600,462	604,156		
Cross-country skiing	13.2	568,665	585,879	591,738	592,634		
Downhill skiing	11.7	490,825	503,275	506,164	504,116		
Backpacking	9.8	366,005	372,102	377,737	383,791		
Jet-skiing	8.6	355,589	362,828	363,285	359,868		
Horseback riding	7.8	313,744	318,546	319,585	318,171		
Sailing	6.6	268,514	278,266	286,252	291,595		
Rock climbing	6.4	281,246	289,934	289,915	286,032		

¹ Population projections for 2005 through 2020 were calculated by the University of Wisconsin Applied Population Laboratory (2003).

Table 5: Recreation Participation by WDNR Region

Recreational Activity		Participat	ion by regio	on, % and p	opulation	
,	Northern	Northeast	West Central	Southeast	South Central	Statewide
Adult population (2002) ²	304,465	801,782	675,401	1,531,374	786,550	4,099,572
Walking for pleasure	85.8	83.9	83.5	84.1	85.0	84.3
	261,137	672,878	563,644	1,288,544	668,705	1
Driving for pleasure	69.8	70.9	72.1	66.2	72.0	69.5
	212,642	568,665	487,035	1,014,463	566,695	
Swimming ³	59.0	62.3	54.3	64.7	58.8	61.0
	179,662	499,793	366,813	990,417	462,118	
Picnicking	60.6	60.1	58.4	57.9	58.5	58.7
	184,394	481,970	394,362	887,180	460,159	
Wildlife viewing ²	67.6	61.0	59.0	50.6	51.2	55.4
	205,796	489,399	398,651	774,912	402,962	
Bicycling ²	38.5	51.1	49.7	50.2	47.5	48.9
	117,173	409,823	335,678	768,069	373,639	
Fishing ²	60.0	50.3	54.1	43.2	43.2	47.6
	182,679	402,995	365,464	662,087	339,978	
Bird watching/other nature	50.0	45.4	50.6	41.8	49.1	46.0
study	152,233	363,897	342,067	640,480	386,153	
Hiking	51.4	40.7	49.1	54.4	43.3	48.5
	156,582	326,440	331,670	832,439	340,632	
Day hiking ²	46.9	35.8	42.6	41.7	43.4	41.4
	142,792	287,431	287,598	638,828	341,360	
Motor boating ²	52.1	43.5	43.6	35.8	37.9	40.2
	158,691	348,738	294,794	548,196	297,765	
Camping, tent & RV ²	34.2	36.3	38.4	30.7	37.7	34.6
	104,256	290,791	259,459	469,542	296,219	
Bird watching ²	42.6	37.2	34.6	33.1	38.7	36.0
	129,680	298,499	233,919	507,383	304,595	
Running	34.2	26.4	33.3	41.6	28.6	34.2
	104,159	211,459	225,134	637,141	224,729	
Nature photography	40.4	37.9	34.0	33.1	37.5	35.6
	123,154	303,854	229,598	507,077	295,238	
Golfing ²	18.3	37.1	26.2	33.1	22.4	29.6
	55,747	297,290	176,783	506,705	176,572	

² Percents show the proportion of adult residents within each region who participate in a given activity regardless of where the activity takes place. Total regional populations are based on US Census 2004. ³ There are measurable differences in participation rates among regions for this activity (p=0.05).

Recreational Activity	Participation by region, % and population								
·	Northern	Northeast	West Central	Southeast	South Central	Statewide			
Adult population (2002) ¹	304,465	801,782	675,401	1,531,374	786,550	4,099,572			
Camping with a tent ²	24.2	25.1	29.0	22.3	30.7	25.7			
	73,774	201,090	195,575	341,085	241,172				
Hunting ²	40.9	26.4	29.4	16.7	21.7	23.5			
	124,554	211,494	198,885	256,023	170,550				
Mountain biking	19.4	21.2	22.0	24.4	20.6	22.3			
	59,202	170,075	148,259	373,618	161,937				
Canoeing ²	25.8	16.9	21.6	12.9	19.4	17.3			
	78,423	135,735	145,595	197,673	152,597				
Ice skating	21.9	19.5	27.7	13.6	18.3	18.6			
	66,602	156,191	187,034	207,964	143,881				
ATV Riding ²	25.7	20.1	16.9	7.1	13.4	13.8			
	78,211	160,953	114,427	108,582	105,342				
In-line skating	5.3	16.5	14.0	17.6	16.9	15.7			
	16,024	132,162	94,411	270,242	132,794				
Camping with an RV ²	11.5	16.4	18.1	10.8	10.8	13.2			
	35,131	131,694	122,469	165,934	84,958				
Snowmobiling ²	22.9	18.6	19.8	10.5	7.1	13.9			
	69,831	149,030	133,964	161,000	56,182				
Cross-country skiing	16.7	15.0	15.5	12.5	13.6	14.0			
	50,744	119,952	104,995	191,719	106,594				
Downhill skiing ²	8.6	12.5	18.4	10.0	5.0	10.8			
	26,097	100,223	123,966	153,650	39,575				
Backpacking	10.0	8.9	8.9	7.7	10.1	8.8			
	30,447	71,588	59,846	117,798	79,150				
Jet-skiing	7.3	10.4	4.5	7.8	6.7	7.5			
	22,346	83,457	30,700	119,814	52,907				
Horseback riding	5.6	5.6	8.7	8.1	10.2	7.9			
	17,153	45,044	58,928	123,861	80,260				
Sailing ²	4.5	5.1	4.3	8.6	6.4	6.5			
	13,715	40,692	29,112	131,628	50,643				
Rock climbing	7.9	5.5	5.4	4.4	5.2	5.2			
	24,037	44,054	36,312	67,067	40,860				

Table 6: Recreation Participation by Age

Recreational Activity		Participation by age, % and population								
	18 to 29 years old	30 to 39 years old	40 to 49 years old	50to 59 years old	60 to 69 years old	70 to 79 years old	80 years old or more	Statewide		
Adult population (2002) ¹	883,701	776,925	870,295	647,070	397,054	316,225	211,862	4,099,572		
Walking for pleasure	83.7	89.4	87.6	82.1	79.7	65.5	51.4	81.9		
	738,355	688,992	764,492	531,412	318,239	206,573	108,911			
Driving for pleasure	68.6	72.8	68.7	71.9	66.3	54.0	40.0	67.1		
	605,354	561,526	599,561	465,743	264,741	170,177	84,810			
Swimming	77.5	81.2	68.2	51.8	34.6	18.3	3.4	59.6		
	683,204	626,129	595,081	335,673	138,330	57,760	7,116			
Picnicking	60.2	71.5	65.2	50.4	41.1	35.9	25.2	56.3		
	531,281	551,404	568,513	326,105	164,275	113,262	53,381			
Wildlife viewing	46.9	63.1	66.4	56.6	57.2	34.2	29.4	54.7		
	413,374	486,283	579,022	366,729	228,509	107,833	62,239			
Bicycling	63.9	63.2	59.2	41.0	25.3	10.2	1.1	48.0		
	563,870	486,940	516,122	265,381	101,181	32,130	2,372			
Fishing	53.2	59.2	49.8	45.2	40.5	29.8	18.1	47.5		
	469,429	456,041	434,066	292,469	161,691	94,086	38,387			
Bird watching/other	35.9	49.3	45.8	51.3	51.1	41.2	46.3	45.4		
nature study	316,633	380,429	399,928	332,272	204,192	129,955	98,112			
Hiking	49.4	59.0	51.2	48.9	38.6	22.0	16.7	46.6		
	435,658	454,791	446,774	316,418	154,061	69,298	35,316			
Day hiking	44.4	52.2	45.6	44.0	31.3	19.4	12.5	41.2		
	391,610	402,199	398,011	284,800	124,908	61,134	26,469			
Motor boating	47.8	51.0	41.2	40.3	30.8	24.0	12.4	40.5		
	421,546	393,413	359,569	261,247	122,954	75,780	26,309			

Recreational Activity		Participation by age, % and population								
	18 to 29 years old	30 to 39 years old	40 to 49 years old	50to 59 years old	60 to 69 years old	70 to 79 years old	80 years old or more	Average		
Adult population (2002) ¹	883,701	776,925	870,295	647,070	397,054	316,225	211,862			
Camping, tent & RV	52.3	49.6	36.0	24.8	14.5	10.2	5.7	34.6		
	460,950	381,998	313,883	160,829	57,875	32,288	12,133			
Running	56.9	37.0	32.7	30.4	15.0	16.6	5.1	34.0		
	502,030	284,894	285,084	196,663	60,020	52,428	10,826			
Bird watching	16.9	27.5	38.5	47.5	50.2	45.4	54.0	35.7		
	149,313	212,000	335,788	307,399	200,690	143,183	114,391			
Nature photography	28.9	41.1	41.0	37.5	32.1	17.8	17.8	34.0		
	254,784	317,086	357,356	242,747	128,117	55,966	37,639			
Golfing	33.1	38.2	37.3	22.7	13.5	17.8	3.1	28.7		
	292,348	294,719	325,488	147,335	54,066	56,042	6,469			
Camping with a tent	45.7	39.4	25.4	13.3	7.3	2.6	2.9	25.8		
	403,164	303,761	221,219	86,347	29,089	8,334	6,119			
Hunting	25.7	32.2	28.2	24.7	17.7	11.2	6.7	24.4		
	226,967	248,554	246,142	159,673	70,671	35,385	14,286			
Mountain biking	34.0	29.0	28.6	16.3	8.0	2.4	<1.0	22.4		
	299,728	223,206	249,816	105,531	32,010	7,580	0			
Canoeing	26.3	22.6	18.7	15.4	8.9	5.7	3.4	17.8		
	231,555	174,137	162,764	99,634	35,466	17,943	7,170			
Ice skating	25.4	26.0	21.2	6.1	7.0	<1.0	<1.0	16.5		
	223,625	200,531	184,534	39,655	28,115	0	0			
ATV Riding	23.3	17.3	15.8	16.8	4.1	4.2	5.3	15.3		
	205,528	133,562	137,442	108,761	16,304	13,371	11,141			
In-line skating	28.6	23.6	17.5	5.5	1.4	<1.0	<1.0	15.3		
	251,846	182,310	152,947	35,849	5,613	0	0			

Recreational Activity	Participation by age, % and population							
	18 to 29 years old	30 to 39 years old	40 to 49 years old	50to 59 years old	60 to 69 years old	70 to 79 years old	80 years old or more	Average
Adult population (2002) ¹	883,701	776,925	870,295	647,070	397,054	316,225	211,862	
Camping with an RV	15.5	17.4	12.9	11.9	10.7	7.5	5.8	13.2
	137,144	134,035	112,581	77,110	42,707	23,766	12,238	
Snowmobiling	22.8	21.6	12.6	7.2	5.0	1.1	6.0	13.6
	200,729	166,388	109,524	46,652	20,060	3,381	12,794	
Cross-country skiing	13.3	13.6	19.8	16.1	8.3	3.7	<1.0	13.3
	117,396	104,933	172,349	104,333	33,353	11,750	0	
Downhill skiing	21.1	14.5	11.2	6.0	5.2	1.6	<1.0	11.2
	186,464	111,999	97,463	38,686	20,586	5,169	0	
Backpacking	8.8	15.6	12.3	5.1	6.3	4.6	<1.0	9.2
	77,920	120,382	107,066	32,812	25,135	14,563	0	
Jet-skiing	17.7	12.3	4.8	3.5	1.1	<1.0	<1.0	7.8
	156,194	94,794	41,956	22,933	4,498	0	0	
Horseback riding	11.0	12.9	7.9	6.2	<1.0	<1.0	<1.0	7.5
	97,412	99,172	68,999	40,349	0	0	0	
Sailing	8.6	8.4	6.5	4.8	5.5	2.3	<1.0	6.3
	75,905	64,686	56,644	31,303	21,999	7,394	0	
Rock climbing	13.1	4.7	6.5	5.8	2.2	<1.0	<1.0	6.2
	115,507	36,614	56,912	37,418	8,854	0	0	

Table notes:

All activities have a measurable difference in participation rates across age categories (p=0.05).

¹ The adult population is based on US Census 2002.

Table 7: Recreation Participation by Gender

Recreational Activity	Participation by gender, % and population				
	Male	Female	Statewide		
Adult population (2002) ¹	2,003,525	2,096,046	4,099,571		
Walking for pleasure	80.1	83.6	81.9		
	1,603,868	1,753,106			
Driving for pleasure	68.3	66.0	67.1		
	1,367,777	1,384,134			
Swimming ²	63.1	56.3	59.6		
	1,263,767	1,179,525			
Picnicking	54.2	58.4	56.3		
	1,084,977	1,223,243			
Wildlife viewing ²	59.6	50.1	54.7		
	1,194,294	1,049,696			
Bicycling ²	51.1	45.0	48.0		
	1,024,447	943,549			
Fishing ²	58.8	36.7	47.5		
	1,177,790	768,378	.,,,		
Bird watching/other nature	45.1	45.7	45.4		
study	903,424	958,096			
Hiking	49.9	43.6	46.6		
	998,882	913,433			
Day hiking ²	43.8	38.7	41.2		
	878,017	811,114			
Motor boating ²	49.8	31.6	40.5		
	997,537	663,280			
Camping, tent & RV ²	39.6	29.9	34.6		
	792,784	627,172			
Running	37.2	30.9	34.0		
	744,420	647,526			
Bird watching ²	31.9	39.3	35.7		
	639,463	823,300			
Nature photography	32.5	35.5	34.0		
	650,431	743,263	2 110		
Golfing ²	36.8	21.0	28.7		
	736,664	439,803			

Total male and female populations are based on US Census 2002.

There are measurable differences between years in participation for this activity (p=0.5).

Recreational Activity	Participation by gender, % and population					
•	Male	Female	Statewide			
Adult population (2002) ¹	2,003,525	2,096,046	4,099,571			
Camping with a tent ²	29.4	22.4	25.8			
	589,397	468,636				
Hunting ²	41.3	8.3	24.4			
	826,925	174,752				
Mountain biking ²	25.4	19.5	22.4			
	508,317	409,555				
Canoeing ²	21.5	14.2	17.8			
	431,129	297,542				
Ice skating	16.4	16.6	16.5			
	327,772	348,687				
ATV Riding ²	21.4	9.4	15.3			
	428,545	197,565				
In-line skating ²	10.1	20.3	15.3			
	203,029	425,536				
Camping with an RV ²	15.4	11.0	13.2			
	308,815	230,766				
Snowmobiling	15.3	12.0	13.6			
	307,394	252,132				
Cross-country skiing	13.1	13.4	13.3			
	262,444	281,671				
Downhill skiing	12.9	9.6	11.2			
	258,939	201,428				
Backpacking ²	12.9	5.7	9.2			
	259,390	118,488				
Jet-skiing	9.6	6.1	7.8			
	191,741	128,634				
Horseback riding	8.0	6.9	7.5			
	161,145	144,787				
Sailing ²	7.4	5.2	6.3			
	148,279	109,651				
Rock climbing ²	8.6	3.9	6.2			
	173,207	82,099				

Table 8: Recreation Participation by Income

Recreational Activity	Participation by income, % and population						
	Under \$20,000	\$20,000 to \$35,000	\$35,000 to \$50,000	Over \$50,000	Statewide		
Adult Population (2000) ¹	1,843,562	1,080,799	566,536	499,839	3,990,736		
Walking for pleasure ³	74.7	82.8	88.2		80.5		
2	1,344,069	884,686	486,262	424,182			
Driving for pleasure ²	59.6	72.6	74.6	70.3	66.5		
	1,066,188	769,474	394,997	329,457			
Swimming ²	46.9	63.7	66.0	74.1	57.5		
	839,763	678,197	359,786	352,132			
Picnicking ²	46.8	57.6	54.6	65.7	53.1		
	793,943	559,917	253,614	283,060			
Wildlife viewing ²	45.8	57.9	59.6	64.4	52.8		
	796,156	441,578	240,941	303,447			
Bicycling ²	39.0	44.5	57.5	56.8	45.3		
	708,158	475,320	317,096	275,305			
Fishing ²	40.0	51.7	54.0	57.8	47.4		
	725,402	552,685	297,684	280,266			
Bird watching/other nature	44.5	42.6	51.2	49.6	45.5		
study	797,453	453,565	279,176	235,511			
Hiking							
Day hiking ²	36.0	41.3	46.7	47.0	40.3		
	651,421	440,352	253,719	225,383			
Motor boating ²	28.7	38.5	49.0	55.0	37.5		
	520,223	411,007	270,251	266,432			
Camping, tent & RV ²	31.3	36.5	44.4	34.7	35.0		
	568,814	389,565	244,916	1			
Running	34.5	25.8	38.8	i i	33.1		
	436,561	196,824	156,739				
Bird watching	32.3	22.5	21.1	33.2	28.9		
	561,954	171,838	85,369				
Nature photography ²	30.2	33.2	39.1	43.0	33.8		
	546,993	330,956	206,757		22.0		

¹ Estimates of the total population in each income category were calculated from data in U.S. Census 2003.

There are measurable differences between years in participation for this activity (p=0.5).

Recreational Activity	Participation by income, % and population						
	Under \$20,000	\$20,000 to \$35,000	\$35,000 to \$50,000	Over \$50,000	Statewide		
Adult Population (2000) ¹	1,843,562	1,080,799	566,536	499,839	3,990,736		
Golfing ²	13.8	27.7	32.6	50.4	24.5		
	234,285	269,552	151,555	217,228			
Camping with a tent ²	24.5	29.2	31.0	26.1	26.9		
	440,450	312,174	170,945	125,667			
Hunting ²	13.4	28.2	34.5	35.5	23.1		
	242,525	301,123	190,386	172,024			
Mountain biking ²	16.7	23.5	35.4	23.5	21.4		
	290,451	179,405	143,128	110,617			
Canoeing ²	13.8	17.6	22.6	23.5	17.3		
	250,726	187,797	124,635	114,099			
Ice skating	16.1	15.4	30.6	23.4	18.7		
	237,670	131,393	126,682	87,577			
ATV Riding	17.1	21.8	15.9	16.6	18.1		
	307,401	217,825	84,281	77,530			
In-line skating	5.3	18.0	10.2	13.1	10.6		
	67,284	137,577	41,041	59,112			
Camping with an RV ²	9.9	12.1	20.4	14.6	12.6		
	178,577	128,755	112,395	70,519			
Snowmobiling	11.5	17.3	15.6	11.1	13.5		
	206,088	172,251	82,470	51,990			
Cross-country skiing ²	7.0	11.5	15.2	21.8	11.2		
	127,696	122,378	83,802	105,561			
Downhill skiing ²	6.2	7.2	15.1	15.4	8.9		
	105,733	73,433	78,490	71,257			
Backpacking	8.7	9.8	16.4	14.8	10.9		
	148,038	99,666	85,416	68,237			
Jet-skiing	4.0	6.9	9.5	7.7	6.0		
	71,475	69,002	50,160	35,866			
Horseback riding ²	3.5	7.7	4.4	14.9	6.1		
	59,769	74,512	20,330	64,115			
Sailing ²	3.0	5.1	6.3	10.7	5.0		
	54,049	54,699	34,161	50,875			
Rock climbing	3.8	10.5	14.8	2.0	6.8		
	48,442	79,748	59,787	9,240			

Table 9: Recreation Participation by Education

Recreational Activity	Participation by education level, % and population					
	High School or less	Through College	More than Four years College	Statewide		
Adult Population (2000) ¹	1,977,473	1,762,200	251,063	3,990,736		
Walking for pleasure ⁴	71.8	88.4	96.9	80.5		
	1,410,500	1,539,101	189,597			
Driving for pleasure ²	62.1	70.6	76.6	66.5		
	1,211,356	1,221,362	127,398			
Swimming ²	45.2	69.5	76.8	57.5		
	886,655	1,203,730	139,494			
Picnicking ²	41.6	64.2	76.4	53.1		
	757,504	1,048,747	84,282			
Wildlife viewing ²	51.7	51.9	75.8	52.8		
	875,372	801,717	105,033			
Bicycling ²	35.6	53.8	66.7	45.3		
	700,086	942,674	133,119			
Fishing	44.4	50.7	47.7	47.4		
	873,422	887,421	95,194			
Bird watching/other	42.0	47.9	60.6	45.5		
nature study ²	824,639	830,892	110,173			
Hiking ²	33.9	49.0	81.5	41.9		
	368,374	414,488	55,596			
Day hiking ²	31.3	48.5	58.1	40.3		
	615,053	847,745	108,078			
Motor boating ²	32.9	42.2	41.1	37.5		
	647,304	738,447	82,162			
Camping, tent & RV ²	30.0	39.8	42.8	35.0		
	589,240	696,806	85,536			
Running ²	21.8	43.1	54.1	33.1		
	310,901	572,074	70,061			
Bird watching ²	31.9	24.2	44.7	28.9		
	540,318	373,054	61,951			
Nature photography ²	27.8	38.8	51.3	33.8		
	532,541	673,175	85,111			

¹ Based on U.S. Census 2003.
⁴ There are measurable differences in participation among education levels for this activity (p=0.5).

Recreational Activity	Participation by education level, % and population						
	High School or less	Through College	More than Four years College	Statewide			
Adult Population (2000) ¹	1,977,473	1,762,200	251,063	3,990,736			
Golfing ²	17.2	30.9	49.4	24.5			
	313,330	504,757	54,533				
Camping with a tent ²	20.6	32.5	39.9	26.9			
	405,434	565,794	78,008				
Hunting ²	25.8	21.0	15.4	23.1			
	508,036	367,173	30,849				
Mountain biking ²	16.5	26.0	30.5	21.4			
	280,366	400,939	42,296				
Canoeing ²	11.5	21.9	33.7	17.3			
	225,469	384,424	67,364				
Ice skating ²	6.5	32.3	30.7	18.7			
	106,041	445,346	31,934				
ATV Riding ²	20.7	16.6	3.6	18.1			
	395,016	286,426	5,594				
In-line skating ²	8.5	11.9	20.7	10.6			
	120,522	157,725	26,766				
Camping with an RV	12.4	12.9	11.1	12.6			
	243,302	225,305	21,639				
Snowmobiling ²	16.4	11.1	5.5	13.5			
	312,204	191,896	8,700				
Cross-country skiing ²	5.1	14.9	39.2	11.2			
	100,721	260,391	78,325				
Downhill skiing ²	2.2	16.0	18.0	8.9			
	42,337	260,267	26,309				
Backpacking ²	5.2	15.9	29.3	10.9			
	99,323	259,164	42,870				
Jet-skiing	3.9	8.4	5.2	6.0			
	74,281	144,065	8,157				
Horseback riding ²	4.4	7.2	19.1	6.1			
	79,544	118,070	21,112				
Sailing ²	2.8	6.3	16.7	5.0			
	54,964	108,535	30,285				
Rock climbing	3.7	10.5	2.9	6.8			
	53,357	140,143	3,717				

References

References

Cordell, H.K., B. Lewis, and B.L. McDonald

"Long-term Outdoor Recreation Participation Trends," pp. 35-38 in *Proceedings of the Fourth International Outdoor Recreation and Tourism Trends Symposium and the 1995 National Recreation Resource Planning Conference*, May 14-17, 1995, St. Paul, MN, compiled by J.L. Thompson, D.W. Lime, B. Gartner, and W.M. Sames, University of Minnesota, College of Natural Resources and Minnesota Extension Service, St. Paul, MN.

U.S. Bureau of Outdoor Recreation

1966 *The 1965 Survey of Outdoor Recreation Activities*, U.S. Government Printing Office, Washington, D.C.

U.S. Bureau of Outdoor Recreation

1972 *The 1970 Survey of Outdoor Recreation Activities, Preliminary Report*, U.S. Government Printing Office, Washington, D.C.

U.S. Census Bureau

2003 (PUMS5_55.txt) "2000 Public Use Microdata Sample, Wisconsin 5% Sample," http://www2.census.gov/census_2000/datasets/PUMS/FivePercent/Wisconsin/PUMS5_55.txt.

U.S. Census Bureau

2000a (ST-99-17) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1992, http://www.census.gov/popest/archives/1990s/stas/st-99-17.txt.

U.S. Census Bureau

2000b (ST-99-16) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1993, http://www.census.gov/popest/archives/1990s/stas/st-99-16.txt.

U.S. Census Bureau

2000c (ST-99-15) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1994, http://www.census.gov/popest/archives/1990s/stas/st-99-15.txt.

U.S. Census Bureau

2000d (ST-99-14) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1995, http://www.census.gov/popest/archives/1990s/stas/st-99-14.txt.

U.S. Census Bureau

2000e (ST-99-13) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1996, http://www.census.gov/popest/archives/1990s/stas/st-99-13.txt.

U.S. Census Bureau

2000f (ST-99-12) Population Estimates for the U.S. and States by Single Year of Age and Sex: July 1, 1997, http://www.census.gov/popest/archives/1990s/stas/st-99-12.txt.

U.S. Heritage Conservation and Recreation Service

1979 *The Third Nationwide Outdoor Recreation Plan*, U.S. Government Printing Office, Washington, D.C.

U.S. National Park Service

1986 1982-1983 Nationwide Recreation Survey, U.S. Government Printing Office, Washington, D.C.

Wisconsin Department of Natural Resources

1991 Wisconsin Statewide Comprehensive Outdoor Recreation Plan for 1991-96, Wisconsin Department of Natural Resources, Madison, Wisconsin.

Appendix

Survey Questions

[Comments are in square brackets, "[]". The year(s) a question was asked are indicated by double angle brackets, ">> <<". Interview prompts, used to clarify a question only if the respondent was unsure how to answer, are indicated in parentheses, "()". Possible answers by respondents are indicated in capital letters, and coding of respondents' answer are shown by single angle brackets, "<>"]

[# SECTION 1: Outdoor/Nature area experiences in the last 12 months, locations of outdoor recreation. Because the questions included varied from year to year, the list that follows does not reflect the exact question order used.]

>>1996<<

Did you spend any of your free time participating in outdoor recreation activities in the past 12 months?

- <1> YES [go to next question]
- <2> NO [skip past recreation questions]
- <8> DON'T KNOW [skip past recreation questions]
- <9> REFUSED [skip past recreation questions]

I'm going to read a list of various outdoor recreational activities you might take part in. I'd like you to think about all the outdoor activities you have taken part in during the last 12 months.

>>1992-2002<<

During the last 12 months did you go canoeing?

(In Wisconsin or elsewhere). [1997, 2002]

- <1> YES
- <2> NO
- <8> DON'T KNOW
- <9> REFUSED

```
>>1992-2002<<
       During the last 12 months did you...
       go motor boating?
       (In Wisconsin or elsewhere). [1997, 2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1996<<
       (During the past 12, months did you go...)
       ...swimming?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-2002<<
       (During the last 12 months did you...)
       go cross-country skiing?
       (In Wisconsin or elsewhere). [1997, 2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1992-2002<<
       (During the last 12 months did you...)
                      go bicycling? [1992-1995]
       go biking or bicycle riding? [1996]
       go bicycling on surfaced roads? [1997, 2002]
       ("Surfaced roads" include both gravel and paved roads) [1997, 2002]
       (In Wisconsin or elsewhere). [1997, 2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1996, 2002<<
       During the past 12 months did you go...
       ...walking for pleasure?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1995, 2002<<
       (During the past 12, months did you go...)
       ...day hiking?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1992-1996<<
       (During the past 12, months did you go...)
       ...sailing?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1996, 2002<<
       (During the past 12 months did you go...)
       ...camping using a tent?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1996, 2002<<
       (During the past 12, months did you go...)
       ...camping using a recreational vehicle? [1992-1995, 2002]
       ...camping using a recreational vehicle, an RV? [1996]
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1992-2002<<
       During the last 12 months did you...
       go hunting?
       (In Wisconsin or elsewhere). [1997, 2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-2002<<
       (During the last 12 months did you...)
       go fishing?
       (In Wisconsin or elsewhere). [1997, 2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992-1996<<
                     (During the past 12, months did you go...)
       ...bird watching or other nature study activity?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992, 2002<<
       During the past 12 months did you go. . .
       ... downhill skiing?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1992<<
       During the past 12 months did you go. . .
       ... ice skating?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1992, 2002<<
       During the past 12 months did you go. . .
       ... backpacking?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1993-1996<<
       (During the past 12, months did you go...)
       ...driving for pleasure?
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1996<<
       During the past 12 months did you go. . .
       ... picnicking?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1996<<
       During the last 12 months did you go. . .
       ... horseback riding?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1996, 2002<<
       During the last 12 months did you go. . .
       ... riding all terrain vehicles, ATV's?
       ... riding an all terrain vehicle, an ATV? [2002]
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1996<<
       During the last 12 months did you go. . .
       ... golfing?
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1996, 2002<<
       During the last 12 months did you go. . .
       ... jet skiing?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1996, 2002<<
       During the last 12 months did you go. . .
       ... snowmobiling?
       (In Wisconsin or elsewhere). [2002]
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1997, 2002<<
       (During the last 12 months did you...)
       go off-road bicycling?
       (Mountain biking)
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1997<<
       (During the last 12 months did you...)
       go hiking?
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1997<<
       (During the last 12 months did you...)
       go camping using a tent or a recreational vehicle?
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1997, 2002<<
       (During the last 12 months did you...)
       go bird watching?
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>1997, 2002<<
       (During the last 12 months did you...)
       go view wildlife other than birds?
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>1996-1997, 2002<<
       During the past 12 months, did you photograph wildlife or other nature? [1996]
       (During the last 12 months did you...)
       photograph wildlife or plants? [1997, 2002]
       (In Wisconsin or elsewhere).
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>2002<<
       (During the last 12 months did you...)
       go for a run?
       (In Wisconsin or elsewhere)
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
```

```
>>2002<<
       (During the last 12 months did you...)
       go in-line skating?
       (In Wisconsin or elsewhere)
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
>>2002<<
       (During the last 12 months did you...)
       go rock climbing?
       (In Wisconsin or elsewhere)
       <1> YES
       <2> NO
       <8> DON'T KNOW
       <9> REFUSED
[# SECTION: 2, Demographics]
       And now to finish up, we have a few background questions.
>>1992, 1994-1997, 2002<<
       What is your current age? [1992, 1994-1995, 2002]
       What is your present age? [1996]
       What was your age at your last birthday? [1997]
       <18-97> 18 TO 97 YEARS
       <98> DON'T KNOW
       <99> REFUSED
>>1992, 1997<<
       In what county is your primary residence?
       <FIPS code>
       <998> DON'T KNOW
       <999> REFUSED
```

>>1992-1995, 1997, 2002<<

What is your zip code?

<50000 - 60000> ENTER ZIP CODE

<88888> DON'T KNOW

<99999> REFUSED

>>1992-1997, 2002<<

What is the highest grade of school or year of college you have finished?

- <1> GRADES 1-8
- <2> SOME HIGH SCHOOL
- <3> HIGH SCHOOL GRADUATE OR G.E.D
- <4> VOCATIONAL OR TECHNICAL SCHOOL
- <5> SOME COLLEGE
- <6> COLLEGE GRADUATE
- <7> SOME POST-GRADUATE WORK
- <8> MASTER'S DEGREE OR EQUIVALENT
- <9> PH.D. OR EQUIVALENT

<98> DON'T KNOW

<99> REFUSED

>>1992-1995, 1997, 2002<<

To better understand the relationship between income and public opinion, we ask one income question. Over the last 12 months was your approximate total household income, from all sources before taxes, less than \$20,000, \$20,000 to \$40,000, \$40,000 to \$60,000, or \$60,000 or more?

[1992-1994]

- <1> LESS THAN \$20,000
- <2> \$20,000 \$35,000
- <3> \$35,000 \$50,000
- <4> \$50,000 OR MORE
- <8> DON'T KNOW
- <9> REFUSED

[1995, 2002]

- <1> LESS THAN \$20,000
- <2> \$20,000 \$35,000
- <3> \$35,000 \$50,000
- <4> \$50,000 \$75,000
- <5> \$75,000 \$100,000
- <6> \$100,000 OR MORE
- <8> DON'T KNOW
- <9> REFUSED

[1996]

- <0> LESS THAN \$10,000
- <1> \$10,000 \$19,999
- <2> \$20,000 \$29,999
- <3> \$30,000 \$39,999
- <4> \$40,000 \$49,999
- <5> \$50,000 \$59,999
- <6> \$60,000 OR MORE
- <8> DON'T KNOW
- <9> REFUSED

[1997]

- <1> LESS THAN \$20,000
- <2> \$20,000 \$39,999
- <3> \$40,000 \$59,999
- <4> \$60,000 OR MORE
- <8> DON'T KNOW
- <9> REFUSED